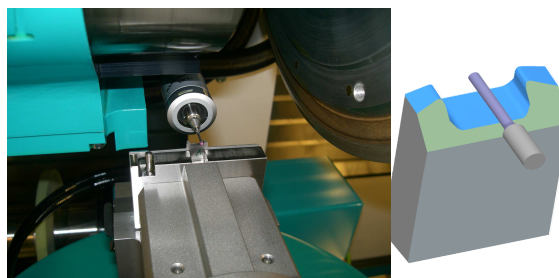


Insert Profile Probing

A8-010

To garanty a precise continuity in production of series of high precision profiled inserts, probing of up to 6 profile keypoints can be used for autocorrection. A measurement point is defined in the station coordinatesystem and the measurement direction. The usage of the probed value can be redefined case by case, depending on the type of wheel and the correction necessity.

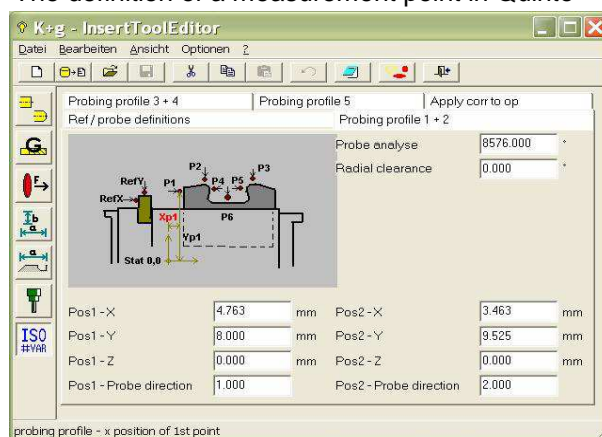


1. Cycletime for Production

| Tool specifications | | | | |
|---------------------|----------|----|----|-----|
| BxH: 9.5x9.5 | | | | |
| Material CARBIDE | | | | |
| Operations | | | | |
| Feed [mm/Min] | 2000 | 45 | 80 | 100 |
| Power [kW] | | 1 | 1 | 1 |
| Cutting feed [m/s] | | 24 | 24 | 24 |
| Used wheels | | | | |
| Grinding time [s] | 11 | 77 | 49 | 21 |
| Total cycle time | 2 Min 38 | | | |

The mentioned cycle times are indicative. The material to be ground, different grinding wheels or other coolants can influence the cycle times considerably.

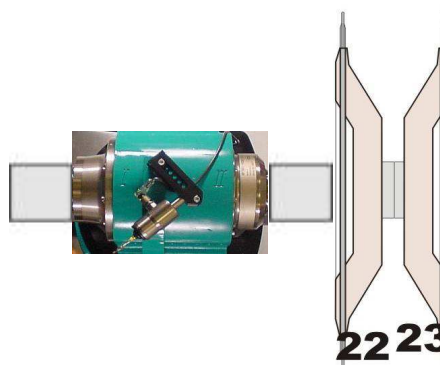
The definition of a measurement point in Quinto



2. Used Grinding Wheels

23 Ø300 14EE1 D64

22 Ø300 14EE1 D46



3. Machine and Software Requirements

Machines: 5 axes CNC grinders : SIR HPM, STL 650
 Control: Fanuc 160i
 Coolant: Synthetic Oil, pressure 6 - 7 bar
 Software: Quinto 4.3

responsible engineer: OP,5.11.07

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